AirTouch states that Ernst & Young examined the Pacific Bell cost studies and found "two critical flaws:" use of Business MTS (i.e., intraLATA long distance) and inclusion of "costs not directly caused by the interconnection of cellular traffic" (noninvestment-related costs).[53] The points raised by Ernst & Young were erroneous.

As we explained to the cellular companies during the contract negotiations, our cost study approach adjusted our Business MTS rates for the points raised now by AirTouch as well as for cellular holding time, completion ratios, time of day volume, number of network switches used, and other cellular calling characteristics. We chose to examine cellular and paging access costs via an outboard cost study, making the necessary adjustments to reflect the unique calling characteristics of wireless carrier access. For example, one of the adjustments was for time of day call distributions that reflected the lower costs due to off-peak usage.

The cellular industry wanted us to conduct its cost investigation within our product costing system. We were not able to complete that type of study. In any event, at that time our product costing system combined Radio Carrier Access costs that were averaged over multiple offerings: Type 1, Type 2A, and Type 2B. As we demonstrated to the cellular industry, this combined approach in the product costing system resulted in higher costs per minute than the outboard approach of adjusting the Business MTS for cellular characteristics. Therefore, the cellular companies benefited from our use of the outboard approach.

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[53] AirTouch, Appendix A, p. 5.

AirTouch argues that we inappropriately included noninvestment-related expenses in costs, which it implies violated the Direct Embedded cost methodology. AirTouch is mistaken. Allocation of noninvestment-related expenses is a necessary part of any direct embedded cost study which requires that all costs be addressed. We have always addressed all of our costs, including those which are not allocated by investments, in our cost studies for tariffed services.

Inclusion of noninvestment-related costs is proper. The wireless industry (as with any customer group) causes us to incur expenses for sales, marketing, legal, finance, customer service, and other similar types of costs. We demonstrated to the industry that these noninvestment-related expenses were indeed caused by the wireless industry. Further we showed the wireless industry how our cost study approach (which we fully disclosed to them) also tended to understate the costs. We started our noninvestment-related expense study with the noninvestment-related costs of Business MTS and intrastate FG-D costs, and then chose or eliminated the specific expense accounts as appropriate. After the wireless industry protested this approach, we detailed the employees' functions and quantities that supported our provision of service to the wireless carriers. Applying the wages, salaries, benefits and other related expenses, we showed the wireless industry that our original approach yielded a lower cost estimate for cellular interconnection services than the more precise approach.

This experience with interconnection charges demonstrates that Sprint and APC are wrong when they state that "[a]ny effort to craft a cost-based system would be doomed to failure and create a wasteful, delay-ridden and inefficient regulatory morass

because of the virtual impossibility of accurately capturing and accounting for costs."[54] The current negotiation process is creating cost-based rates without a regulatory morass and without "inevitable carrier complaints."[55] In fact, as we have discussed, before the NPRM proposed Bill and Keep, CMRS providers defended the current negotiation process and its results.

Comparison To Access Charges Shows No Unreasonable Discrimination

The Allied Personal Communications Industry Association Of California ("Allied") states: "In the IXC situation, the termination charges imposed by the Pacific's approximate 1.75 cents per minute. When Pacific terminates a CMRS-originated call, the charge to the mobile carrier is about 2.48 cents per minute."[56] Contrary to Allied's implication, this price difference is not unreasonable discrimination.

First, the 1.75 cents per minute is the FG-D usage charge that is in the tariff, and the tariff has no use or user restrictions. The CMRS provider is free to purchase it. Before January 1, 1995 CMRS providers and many others did not purchase FG-D because the CPUC imposed a CCL charge on top of our rate that made the FG-D service more expensive for all access customers including CMRS providers. Since January of 1995, some CMRS providers have purchased the FG-D service.

Second, the 2.48 cents per minute charge for our Type 2A Tandem Access interconnection is calculated using the unique cellular calling characteristics, which

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[54] Sprint and APC, p. 5.
[55] See id. at 7.
[56] Allied, p. 6. The Westlink Company makes the same arguments as Allied.

include several factors that increase the cost of cellular interconnection versus IXC interconnection:

- Call Duration is shorter for CMRS;
- Completion Ratios are lower for CMRS;
- Call Distance is longer for CMRS;
- Tandem Switching occurrences are higher for CMRS.

During negotiations, we presented to the CMRS providers our cost studies showing our adjustments for these factors. The key point is that LEC usage costs to interconnect with any carrier are determined by the unique calling characteristics of the calls interconnected. The wireless industry has very short holding times (the average amount of time, measured in minutes, that the two parties talk) which increase the average cost per minute of use of a call. This is because the cost of setting up the call is recovered over a shorter billing period. For example, IXC interconnection averages 4 minutes per call, while cellular averages 2 minutes per call, and paging is only 20 seconds. If it costs 1 cent to set up a call for either carrier, the IXC call set up costs divided by the average minutes is 0.25 cents per minute, the CMRS set up costs are 0.5 cents per minute, and the paging set up costs per minute are higher. (The 1 cent is for illustrative purposes only; the actual cost is lower, but the holding times are those that Pacific Bell experiences.) This shows that due to shorter call holding time (because the CMRS providers have such high usage charges and their end users talk for short times) the average cost per minute of use for interconnection is higher for

CMRS carriers. Our high costs of serving CMRS providers makes giving away our service via Bill and Keep all the more egregious.

Although misguided, some of AirTouch's comments demonstrate the economics of interconnection. For example, AirTouch mentions Feature Group D and states, "We currently used [sic] this type of service only in the mobile-to-PSTN direction."[57] The reason it does not use FG-D in the PSTN-to-mobile direction is to avoid costs. Because of the CMRS providers' policy of charging the wireless customer to receive calls, the CMRS providers dramatically depress completion ratios. FG-D in the PSTN-to-mobile direction is billed on attempted calls, as opposed to being billed on completed calls as it is in the mobile-to-PSTN direction. The ratio of completed calls to attempts for PSTN-to-mobile calls is less than 50%. Therefore, the CMRS providers would have to pay the LECs for the half of the calling volume where they cannot bill their end users and for which they currently do not pay. What this shows is that (contrary to the CMRS providers' comments) the LECs provide CMRS carriers with numerous options for interconnection. These options give them many opportunities to reduce their costs, even though doing so reduces the LECs' revenue - - while the LECs' costs remain the same.

Comparison To MFS Agreement Shows No Unreasonable Discrimination

AirTouch points out that MFS "has entered into an interconnection agreement with Pacific Bell in which they will pay each other reciprocal compensation for local

[57] AirTouch, p. 6.

traffic of 0.75 cents per minute." AirTouch states that it pays far higher rates to interconnect.[58] Allied makes similar points.[59]

AirTouch and Allied do not, however, point out that the arrangement that we negotiated with MFS is extremely different than the arrangements that we negotiated with them. First, the rates charged MFS were negotiated as part of a very comprehensive package of local interconnection arrangements. Second, the interconnection rates for local and toll calling differ in the arrangement with MFS, with toll service priced at our intrastate access rates.[60] Third, as discussed above, the LECs' costs of interconnection with CMRS providers are higher than with landline carriers because of the call characteristics. Fourth, a key difference is that CMRS providers agreed to compensate us for allowing end users to have LATA-wide calling to CMRS end users without any additional intraLATA toll charges above the rate for local service.

In addition, the extent to which the California PUC actions governing the interconnection between LECs and CLCs should also apply to CMRS providers is partially dependent upon the degree to which the CMRS providers are viewed as competing LECs with the same obligations. The CPUC has set forth extensive

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[58] Id. at 33.

[59] Allied, p. 7.

[60] In its comments (page 11) in this proceeding, the California PUC states: "The Commission [FCC] noted the Pacific Bell-MFS agreement's reciprocal call termination rate of 0.75 cents per minute. According to the parties to this agreement, this rate is equivalent to the per minute cost of switched access service at California intrastate rates." It should be noted that 0.75 cents is the charge for termination of local calls. Rates comparable to our intrastate switched access rates (average of approximately 1.4 cents per minute) apply for the completion of intraLATA toll calls under the agreement.

guidelines that CLCs must follow in offering local exchange service to California consumers. These CLCs are subject to many of the same consumer protection, privacy, equal access, and universal service obligations that govern incumbent LECs but not CMRS providers at this time.

Charges To LEC End Users Do Not Cover Our Interconnection Costs

Allied states, "The calling party pays Pacific the tariffed rate for a local call, i.e., usually four cents,...."[61] We charge the calling party for a local call, but most residence customers have flat-rate monthly service, which includes free local calling. Our traffic studies indicate that most calls to paging numbers originate from residential customers so that we receive no revenue from our end users from the majority of calls.

Concerning our Type 2A Interconnection,[62] Allied states that "the paging carrier pays a transport charge of 1.2 cents (more or less) to Pacific Bell where the call in question has been carried more than 12 miles from the originating tandem."[63] Allied does not point out, however, that on toll calls of over 12 miles from the originating caller's central office our end user pays no toll charges precisely because CMRS providers requested that arrangement (known as Land-to-Mobile 2 or "LM 2") and agreed to compensate us for it.

This LM 2 arrangement, designed to benefit CMRS providers, explains the joint statement by Sprint Spectrum and APC that "even though landline subscribers benefit

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[61] Id. at 5.
[62] Id. at 6.
[63] Id.

from communicating with CMRS customers, landline subscribers rarely, if ever, must pay for that benefit."[64] This arrangement also explains why Paging Network, Inc., is totally wrong when it says that LECs, including Pacific Bell, are double or triple charging for interconnection.[65] Paging Network states, "These LECs concede that the transport link is already paid for by the rates paid by the originating end user or the IXC that handles the traffic."[66] For traffic not involving an IXC, we concede no such thing, and it is untrue.

We Reasonably Attempt To Recover Our Costs Of Opening NXX Codes

AirTouch states that LECs essentially share the costs of programming their switches for new NXX codes with carriers other than CMRS providers, but charge CMRS providers.[67] Allied and Paging Network make similar statements.[68]

Pacific Bell has long had a policy of recovering our actual costs for this expense. As is normal in the industry, we recover our costs from CMRS providers.[69] Paging Network points out that Pacific Bell's charges are higher than those of other BOCs. This is not surprising, since on average we typically have substantially more switches per NPA than other BOCs, and most of the costs associated with NXXs arise from labor involved in programming our switches for the numbers.

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[64] Sprint Spectrum and APC, p. 20.
[65] Paging Network, p. 21.
[66] Id. at 20.
[67] See AirTouch, p. 22, n. 22.
[68] See Allied, pp. 6-7; Paging Network, p. 22.
[69] See The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, CL-379, Declaratory Ruling, released May 18, 1987.

LEC-to-LEC cost recovery of NXX code openings had traditionally been recovered through pooling, but some LECs began withdrawing from pooling. Also, other competitors were beginning to emerge and wanted NXX codes. Pursuant to the CPUC's requirements, and unlike the current process for CMRS, those same costs associated with opening NXX codes for CLCs are temporarily going into a Memorandum Account until the CPUC determines costs for NXX code openings and a recovery mechanism.[70]

We Reasonably Route Calls

Allied complains that Pacific Bell routes calls to GTE California Incorporated ("GTE-C") that are destined for CMRS providers resident in GTE-C's franchise territory (GTE-C then hands them off to the CMRS provider). As Allied explains, we and GTE-C each have NXXs allocated to CMRS providers that are "homed" to our tandem offices. Pursuant to routing standards and LEC agreements, traffic with a particular NXX is to be directed to its corresponding tandem, and we are meeting the requirements of these agreements. We are negotiating with GTE-C concerning possible alternative arrangements.

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[70] See Resolution T-15824, January 17, 1996, Pacific Bell (U-1001-C), California PUC Order Adopting With Modifications The Co-Carrier Interconnection Agreement Between Pacific Bell And MFS Intelenet Of California, p. 8. As part of the overall Agreement, MFS would not have been charged for NXX codes, but the California PUC instituted the Memorandum Account approach for MFS and other CLCs pending further proceedings.

The Flow Of Traffic Is Over Four-To-One In Favor Of The Mobile-To-Land Direction

Western Radio "questions the accuracy of Pacific Telesis' claim (NPRM at note 60, page 21) that 94% of CMRS traffic terminates on its wireline network."[71] As we showed in our Comments,[72] we have now calculated a figure of 92.6% mobile-to-land from the records that we use to bill the CMRS providers. We also now have estimated the traffic balance for local wireless traffic that we currently do not record or bill. When we add in that estimate, the traffic flow is approximately 86.9% mobile-to-land. The traffic flow is approximately 83.1% mobile-to-land when we also include traffic billed to an IXC. No matter how we calculate it, the flow of traffic is over four times greater for mobile-to-land than for land-to-mobile. Similarly, Western Wireless states that "[a]pproximately 80% of the total traffic that is routed over Western Wireless' network originates on its network and approximately 20% originates on the local exchange network."[73]

Based on six weeks of traffic, APC states that its flow of PCS traffic has been between 57% and 60% mobile-to-land. APC names four reasons why its traffic is less unevenly balanced than other CMRS providers' traffic, including: 1) no charges to subscribers for the initial minute of incoming calls; 2) all subscribers have been provided caller ID; 3) APC phones have a long battery life; and 4) all unanswered calls are routed automatically to voice mail.[74]

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[71] Western Radio, p. 2.
[72] Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, p. 13, n. 30.
[73] Western Wireless, p. 13.
[74] APC, pp. 9-10.

Given the lengths that APC has gone to in order to try to balance its traffic, the surprising thing is that it has failed to do so. Since no other CMRS providers have adopted these special measures - - and most are highly unlikely to do so, APC's test demonstrates that the CMRS traffic imbalance is likely to remain for a long time.[75]

In its discussion of APC's limited experience, Sprint acknowledges that it may prove "not to be the case" that "PCS-LEC traffic may be fairly evenly balanced."[76] Moreover, Sprint points out that what the data from these "early operations of a single PCS licensee in only one market" show is merely that "there is at least a possibility that PCS will vary substantially from the traffic characteristics of cellular service."[77] That is, APC's very limited experience says little about the overall PCS market and nothing about cellular. Contrary to Sprint's more reasonable assessment of APC's limited experience, Sprint Spectrum and APC leap to the following inexplicable conclusion: "APC's experience in achieving a near-balance in traffic demonstrates that a nationwide bill-and-keep system would be fair because of the potential that all CMRS providers have for achieving traffic parity."[78]

APC, Sprint Spectrum/APC, and PCIA assert that Bill and Keep would result in even, or at least more even, traffic flows.[79] Actually, the opposite is true. With Bill and Keep, the providers with the less extensive networks (PCS and other CMRS providers) have the incentive to build out their networks as little as possible and take a free ride on

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[75] See Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, Exhibit B, Statement of Professor Jerry A. Hausman, para. 28.

[76] Sprint, p. 8.

[77] Id. at 4.

[78] Sprint Spectrum and APC, p. 22.

[79] APC, pp. ii & 11; Sprint Spectrum and APC, p. 20; PCIA, p. ii.

the networks of the providers with extensive networks (the LECs).[80] For instance, Sprint states that "the PCS provider would find it more convenient to deliver traffic to a LEC at a single point of interface in a local calling area than to route it to multiple LEC end offices."[81] A great deal of traffic could be delivered to the LEC network from a single point of presence. This arrangement also would make IXC arbitrage all the easier and more attractive to IXCs. We cannot distinguish wireless traffic from IXC traffic if it is delivered to us over a single pipe. The goal would be to send a large volume of traffic to the LECs' networks because termination would be free.

Western Radio argues that considering one-way pager traffic together with two-way mobile traffic improves the overall balance of traffic flow and supports the adoption of Bill and Keep.[82] Paging companies, however, understandably oppose Bill and Keep because paging traffic is 100% land-to-Mobile.[83] Thus, CMRS providers only support Bill and Keep when the traffic flow is in their favor.

Sprint recommends that Bill and Keep be limited to PCS providers. It states that even if PCS-to-LEC traffic does not prove to be fairly evenly balanced, "the PCS industry will be largely in a start-up posture during the interim period" and is not likely to exchange enough traffic to harm the LECs.[84] Sprint, however, does not point out that

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[80] See Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, Exhibit B, Statement of Professor Jerry A. Hausman, para. 18-19.

[81] Sprint, p. 10.

[82] Western Radio, p. 3, states that considered together, the traffic is close to balanced. But that is incorrect since there is not nearly enough paging traffic to offset the imbalance in two-way mobile traffic. Moreover, aggregating the markets for Bill and Keep determinations would make no sense. The traffic flow for each service would still be imbalanced.

[83] See e.g. PCIA, p. ii; Arch, p. ii; Celpage, p. i; Paging Network, p. ii.

[84] Sprint, p. 8.

once a measure is adopted for an interim period, those who benefit from the measure traditionally have fought to retain it and have often won.[85] Moreover, in their joint comments, Sprint Spectrum and APC already state that the interim period "should, at a minimum, include the five-year period of the initial population-coverage requirement for PCS in the Commission's rules."[86]

Sprint's point that PCS traffic will be relatively low in the near-term does not support a radical change to Bill and Keep. Neither does its point that "[a]ttempting to determine appropriate interconnection charges for interim purposes is a practical impossibility."[87] Rather these points support the status quo with existing interconnection arrangements. PCS providers may continue to negotiate the same types of LEC interconnection arrangements as cellular providers during the interim period before Mutual Compensation is implemented.

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[85] See Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, Exhibit B, Statement of Professor Jerry A. Hausman, para. 20-65.

[86] Sprint Spectrum and APC, p. 28 (emphasis added).

[87] Sprint, p. 7.

2. GENERAL PRICING PRINCIPLES SUPPORT TOTAL COST RECOVERY

Long Run Incremental Cost ("LRIC") Should Be The Price Floor

AirTouch admits "that pricing all services at long-run incremental cost would fail to cover the full costs of production."[88] Yet, AirTouch asserts that it should not have to pay above LRIC.[89] Thus, it does not want to pay for its share of the costs.[90]

AirTouch's demand for interconnection priced at LRIC depends on its assumption that LECs "price end-user services at incremental cost...."[91] Actually, we price one end user service, local-residential service, below LRIC and price our others above LRIC to support residential service and recover shared and common costs. Appropriate use of LRIC is for price floors.[92]

AirTouch also is wrong when it states that the charges for local service "contribute toward the recovery of the LECs' embedded costs."[93] Our principal local service is residential. In every cost study filed with the CPUC, Pacific Bell has demonstrated that its price for local service is below embedded cost. Further, in the

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[88] AirTouch, p. 12.

[89] Id.

[90] Other CMRS providers take this same uneconomic position. See, e.g., Allied, p. 9, Cox, p. 16; CTIA, pp. 35-36.

[91] Id. at 14.

[92] See Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, pp. 37-40, 44-48, and Exhibit D (Statement By Drs. Tardiff and Emmerson) at 4,5,7.

[93] AirTouch, p. 13.

two incremental cost studies filed, we have demonstrated that the price for basic service does not even recover the incremental cost of its loop. This shortfall is at the heart of the universal service problem. By stating that "[t]here is no need to burden the CMRS providers..." so long as interexchange access and other services contribute to embedded costs, AirTouch implies that the LECs should get recovery of embedded costs from every user of the network except the CMRS carriers. They want any benefits that the CLCs have, but none of the detriments.

This desire for special treatment is confirmed by AirTouch's statement that "LECs already collect sufficient funds to support current universal service policies through existing subsidy mechanisms."[94] At least for now, AirTouch wants to avoid contributing to universal service.[95] AirTouch's statement is contrary to the goal of the industry, regulators, and Congress to ensure affordable phone service in the United States.

AirTouch states that end user services are provided under conditions of imperfect competition and that "[e]conomists analyzing this situation have noted that to get more efficient retail prices (i.e., closer to incremental costs) it may be optimal to lower the price of inputs such as interconnection."[96] It is important to note that AirTouch does not say that "economists" say to lower the prices to LRIC. Professor Hausman agrees with the importance of relatively low priced interconnection, but explains why

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[94] Id.

[95] In a footnote, AirTouch states that CMRS providers should not face any "subsidy burdens" until overall reform of the system that supports universal service is complete. AirTouch acknowledges that "the overall reform process will take time." AirTouch, p. 13 at n. 15.

[96] AirTouch, p. 15, citing Laffont and Tirole.

interconnection pricing must be allowed to recover shared and common costs.[97] We too recognize the importance of striving to keep interconnection prices low. For instance, we price our wireless interconnection with contribution to shared and common costs that is a fraction of the contribution by intraLATA toll.

Total Service Long Run Incremental Cost ("TSLRIC") Should Not Be Used As A Price Floor

Both AT&T and MCI assert that the LECs should price their interconnection services at TSLRIC.[98] MCI states that LECs should account for "the investment that the LEC would make if it were building its plant from scratch...[and] assume that all investment used in terminating CMRS' calls is replaced...."[99] Setting prices at any form of LRIC would be a mistake for the reasons that we have discussed above and in our Comments; LECs could not recover their shared and common costs.[100] LRIC should be used as a price floor, but TSLRIC should not be. Dr. William Taylor explains why "TSLRIC should never be required as a floor for pricing:"

> In circumstances where services are sold at more than one price (e.g., bulk discounts, declining block tariffs, two-part tariffs), the economically efficient floor below which additional units of the service should not be sold is the incremental cost of the additional units. The service as a whole must recover at least the incremental cost of the entire service (including service-specific fixed costs), but any

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[97] Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, Exhibit B, Hausman Statement, para. 12.

[98] AT&T, pp. 2 & 13; MCI, pp. 8-9.

[99] MCI, p. 10.

[100] See Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, pp. 37-40, 44-48.

> individual units of the service should be permitted to be sold at any price that covers the (ordinary) LRIC of supplying those units.[101]

Market Power Is In The Hands Of End Users

CMRS providers assert that the Commission should base its regulatory policy on LEC market power.[102] In our Comments, we explained why this is a huge mistake in the face of the current rapid erosion of market power.[103] Since we filed our Comments, the CPUC opened local exchange competition to full resale.[104] In fact, our competitors can purchase our local exchange services, which are already priced below cost for social policy reasons, at large discounts. As Professor Alfred Kahn explained before the CPUC voted, "AT&T would then be able to undercut the artificially inflated prices that the Baby Bells are forced to charge if they are to have a fair shot at recovering their total costs, without having to bear the burdens that justify that overpricing."[105]

Comcast supports the Brock Interconnection Paper which makes a fundamental error concerning market power. Comcast points out that in a discussion of peak and off-peak pricing Brock stated that "with a very high priced channel, NYNEX could

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[101] NYNEX, Exhibit A, "Affidavit Concerning Interconnection Between Local Exchange Carriers And Commercial Mobile Radio Service Providers," William E. Taylor, March 4, 1996, p. 33.

[102] See, e.g., AirTouch, p. 18; Comcast, p. ii; PCIA, p. 9.

[103] See Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, pp. 40-44.

[104] Earlier in the year, the CPUC opened our local exchange markets to facilities-based competition.

[105] "A Free Ticket to Rich Telecom Markets," Alfred E. Kahn, Wall Street Journal, November 10, 1995.

choose to not terminate traffic through Teleport during the peak hour while Teleport would have little choice but to terminate traffic through NYNEX."[106]

Actually, NYNEX would have no choice over whether or not to terminate the traffic via Teleport; that choice is up to the end user. The Commission has pointed out that, where selections are made, the end user generally selects the local service provider, and thus the carrier terminating a call "has no choice regarding the local service provider whose facilities will be used for that purpose."[107]

The Commission was concerned that this "dichotomy between the service provider selection process and the compensation process may inhibit competition and delay efficient pricing for access services."[108] Actually, this scenario suggests cooperation, not exploitation through uneconomic pricing. Providers need one another.

Accordingly, AirTouch is wrong when it argues that LECs will use their "market power" to block entry of new competitors or weaken existing ones.[109] AirTouch's supposed evidence of LEC misuse of market power is that "LECs demand payment for the ability of narrowband CMRS customers to terminate LEC-originated traffic."[110] Actually, as we have explained, CMRS providers have generally requested the interconnection alternative under which we forego compensation from end users in

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[106] Comcast, p. 13, n. 28, citing the Brock Interconnection Paper.

[107] Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, Second Further Notice Of Proposed Rulemaking, Released September 20, 1995, para. 27.

[108] Id.

[109] AirTouch, p. 18.

[110] Id. at 60.

exchange for compensation from CMRS providers. This shows cooperation, not market power.

Our other actions also show that we cooperate with CMRS providers and value them on our network. For instance, we:

- have dedicated employees whose sole responsibilities are meeting the needs of wireless carriers,[111]
- share our highly competitive cost information with the wireless industry, even though they have refused to reciprocate,
- price our wireless interconnection with contribution to shared and common costs that is a fraction of the contribution from intraLATA toll and other services.

LECs are striving to meet the needs of all customers at lower prices and by so doing are helping consumers and our nation's economy. One of the most remarkable and misleading statements in this proceeding is the joint statement by Sprint Spectrum and APC concerning the roles of the LECs and IXCs in reducing prices:

> Advancements in telecommunications infrastructure have produced not only hundreds of billions of dollars saved by U.S. industry but an effective reduction in the consumer price index of 5 percent in a single year. This development has occurred largely in the absence of competition in the local exchange -- economic savings have been realized by the development of long-distance competition and advancements in technology.[112]

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[111] As AirTouch, p. 17, points out, "CMRS providers typically are the party [sic] seeking interconnection."

[112] Sprint Spectrum and APC, p. 23.

In 1993, Dr. Timothy Tardiff explained that almost all of the IXCs' interstate toll price decreases since divestiture had resulted from the LECs' access price decreases, not from competition or increases of efficiency among IXCs:

> While the outcomes nine years after divestiture -- prices that are 50% lower in real terms, substantially higher volumes, and large gains in consumer welfare -- are favorable beyond dispute, careful attention must be given to the causes of these outcomes. Greater competition by itself did not produce all of these benefits. In fact, lower interstate switched access charges, which resulted from FCC access and separations policies, explain almost all of the demand growth and price reductions seen in interstate toll markets.[113]

More recently, we showed[114] that since 1984, AT&T's access charges (one major component of its costs) have fallen $10 billion nationally; yet it has dropped its tariffed interLATA prices by only $8 billion. Moreover, when the CPUC stopped requiring AT&T to pass savings from reduced access charges to consumers, AT&T stopped doing so. Then MCI and Sprint quickly followed suit. We showed that Pacific Bell's switched access charges have fallen sixty three percent since 1989, more than long-distance prices have fallen.

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[113] "Pricing Interconnection and the Local Exchange Carrier's Competitive Interstate Services," National Economic Research Associates, Timothy J. Tardiff, February 19, 1993, p. 6.

[114] See Memorandum Of Pacific Telesis Group In Support Of Its Motion For A Waiver To Provide Interexchange Services To Customers In California, January 31, 1995, pp. 44 & 55 and affidavits cited therein and attached thereto, United States of America v. Western Electric, Civil Action No. 82-0192 (HHG), United States District Court of the District of Columbia.

The poor showing by IXCs apparently continues:

> Competition among long-distance telephone companies has prompted some fierce sparring in television commercials, but it hasn't done much to lower basic residential long-distance rates, according to a new survey.
>
> During the past five years, basic long-distance rates have gone up 12 percent to 17 percent among the big carriers, according to a new study by Consumer Action, a San Francisco-based watchdog group. Most of that jump has occurred in the past two years.[115]

The CMRS providers' and IXCs' expressions of concern about the effects of LEC market power are misplaced.

[115] "Phone Rates Creep Higher," San Francisco Chronicle, March 19, 1996, p. C1.

3(A). PRICING PROPOSALS BASED ON BILL AND KEEP DO NOT ALLOW THE OPPORTUNITY TO RECOVER COSTS

Non-Price Systems Are Doomed To Failure

CTIA's discussion of economic principles related to the Bill and Keep proposal reveals its lack of any sound economic basis. CTIA explains why pricing signals are important for economic efficiency.[116] CTIA admits that, with usage sensitive costs, Bill and Keep "will not necessarily send optimally efficient pricing signals...."[117] This is an understatement given that Bill and Keep does not send any pricing signal, or alternatively can be viewed as always sending a pricing signal of zero no matter what the economic circumstances. CTIA further admits that a price of zero in the busy hour "sends an inefficient pricing signal by encouraging inefficient use of the network during that time period."[118] These admissions do not stop CTIA from recommending Bill and Keep. What CTIA's argument boils down to is that CTIA does not care about price signals and that the easiest way to ensure that prices are not too high is to set them at zero.[119] That could be said for any service and would be a sure way to force companies out of business.

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[116] CTIA, p. 25.
[117] Id. at 24.
[118] Id. at 28.
[119] See id. at 27.

This Bill and Keep proposal does not satisfy Commissioner Ness' concern that there be "rough justice."[120] Professor Hausman points out, "Non-price systems as proposed by the Commission in the NPRM have been tried and found to create large amounts of economic inefficiency in Eastern Europe and the former Soviet Union."[121] Bill and Keep "will lead to a waste of society's resources which is among the worst possible outcomes of government policy."[122]

Bill And Keep Would Create Arbitrage And Other Economic Distortions

As we discussed above in Part I, Sprint explains the serious arbitrage threat from Bill and Keep because it prices at zero the same network functions that must be paid for by IXCs seeking access to LECs' networks.[123] The creation of arbitrage opportunities is one of the most serious drawbacks of Bill and Keep. We cannot distinguish wireless traffic from IXC traffic if it is delivered to us over a single pipe. Professor Hausman provides examples of how arbitrage may occur:

> Sprint has announced construction of a nationwide PCS network and AT&T will have a combined national PCS and cellular network. Both of these companies could switch significant amounts of their mobile or even landline long distance traffic to their PCS and cellular switches (MTSOs) and then terminate the traffic for free on the LEC network. These companies could thus avoid paying terminating access fees. Given the significant percentage of costs that access creates for IXCs, this strategy would be very attractive and would be a devastating outcome for the LECs.

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[120] Separate Statement of Commissioner Susan Ness, p. 1.
[121] Hausman Statement, para. 44.
[122] Id. at para. 16.
[123] See Sprint, pp. 13-14.

> Note that the strategy would not use any airtime or spectrum which is the scarce resource, but would only need a mobile switch to interconnect the traffic to the LEC network.[124]

Other CMRS providers make inaccurate statements concerning efficiencies of Bill and Keep. APC states that "bill and keep will provide CMRS providers and landline carriers with an incentive to design their networks as efficiently as possible."[125] PCIA states that Bill and Keep "creates incentives for broadband CMRS providers and LECs to be as efficient as possible" and to minimize costs.[126] MCI states that "neither party should burden the other with costs associated with the judgments it made with respect to the design of its respective network."[127]

Actually, granting interconnection to the network owned and built by another without recognizing the cost of the particular interconnection that is sought, encourages minimum investment in interconnecting infrastructure, rather than efficient investment in infrastructure. That is, there is no incentive to build infrastructure that would produce lower overall costs when both firms are considered. This will result in sub-optimizing infrastructure investment and discouraging the innovation of new, more efficient services and technologies.[128]

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[124] Comments By Pacific Bell, Pacific Bell Mobile Services, and Nevada Bell, Exhibit B, para. 21.

[125] APC, p. ii.

[126] PCIA, p. 10.

[127] MCI, p. 7.

[128] CTIA's analogy of Bill and Keep to CPE interconnection is wrong. CTIA (p. 13) states, "The Commission policy not only allowed for interconnection, but also prevented carriers from charging their customers for interconnection of non-carrier CPE (zero cost interconnection)." Actually, customers interconnect their CPE to our network by purchasing tariffed network services at tariffed rates. Moreover, if we install the inside wire, we charge for that service.

That minimizing their own investment in network infrastructure is the goal of CMRS providers is shown by their requests that Bill and Keep be extended to all points of network interconnection. APC states that it would "interconnect at a single point...."[129] Sprint explains that "the PCS provider would find it more convenient to deliver traffic to a LEC at a single point of interface...."[130] CTIA argues that giving away use of part of the LEC's network distorts use of the network; CTIA's answer is that it all should be given away so that parties may interconnect at any one point of their choice.[131] The CMRS providers could interconnect at one point in the LATA and extensively use every part of the LECs' networks for a "free ride."

TCG states, "Bill and Keep places the marketplace emphasis where it belongs - - it tells local service providers of all stripes to build revenues by providing good service to their retail customers, since they will be the primary source of their local revenues."[132] Accordingly, Bill and Keep places all emphasis on one component of providing a service. It takes a complete value chain, however, to provide a service that is purchased by the customer. There are the infrastructure components of the value chain which require significant investment. There are also customer contact and demand channel investment. In a Bill and Keep environment, there is literally no reward for building the backbone of a network. The only compensation comes from attracting and maintaining customers, since compensation comes entirely from one's own customers. Thus, selective traffic aggregation and resale flourish. Because any

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[129] APC, p. ii.
[130] Sprint, p. 10.
[131] See CTIA, pp. 45-46.
[132] TCG, p. 13.